

**Amendments to the Abstract:**

Please insert the Abstract page into the application as the last page thereof.

**Abstract**

A method and device for determining refractive index of an object compared to a refractive index of a surrounding medium. The object is exposed to a laser object beam and the scattered light interferes with a laser reference beam to obtain a hologram. The hologram is analyzed for phase information, and based thereon, it is determined if the refractive index of the object is higher or lower than the refractive index of the surrounding medium.